AMENDMENTS IN THE CLAIMS

1. (Currently Amended) A mobile station device comprising:

a preamble generator for generating a preamble signal to be transmitted in an intermittent pattern that reduces interference on other reverse link channels during a preamble interval prior to a transmission interval of a reverse access channel message; and

a transmitter for spreading and modulating the preamble signal received from the preamble generator and transmitting it to a base station,

wherein the preamble interval includes a non-transmission interval, and

wherein the intermittent pattern is determined using $T = N(P + B) + A$,

where T indicates a total duration of the preamble interval, N is an integer greater than or equal to zero, P indicates a duration of a transmission interval, B indicates a duration of the non-transmission interval, and A indicates a duration of a final transmission interval before the transmission interval of the reverse access channel message.

2. (Original) The mobile station device as claimed in claim 1, wherein the preamble generator comprises:

a generator for generating a reverse pilot signal;

an amplifier for amplifying the reverse pilot signal received from the generator to a predetermined strength; and

a gating controller for intermittently transmitting the reverse pilot signal amplified at the amplifier.

3. (Original) The mobile station device as claimed in claim 1, wherein the preamble interval comprises a repeating cycle of a preamble transmission interval and a preamble non-transmission interval, and wherein the preamble generator generates the preamble signal during the preamble transmission interval.

4. (Original) The mobile station device as claimed in claim 3, wherein the preamble generator generates the preamble signal in the preamble transmission interval just prior to the

transmission interval of the access channel message, the preamble transmission being provided during an ending part of the preamble interval.

5. (Original) The mobile station device as claimed in claim 3, wherein the preamble generator generates the preamble signal using transmission power increased by a predetermined level.

6. (Original) The mobile station device as claimed in claim 3, wherein the preamble generator interrupts generation of the preamble signal upon receiving sync acquisition information from the base station.

7. (Original) The mobile station device as claimed in claim 3, wherein the mobile station shortens the preamble interval and immediately transmits the access channel message, upon receiving sync acquisition information from the base station.

8. (Original) The mobile station device as claimed in claim 6, wherein the sync acquisition information is non-coded data.

9. (Original) The mobile station device as claimed in claim 3, wherein the preamble generator generates the preamble signal with transmission power increased by a predetermined level during a next preamble transmission interval, upon failure to receive sync acquisition information in the preamble non-transmission interval.

10. (Original) The mobile station device as claimed in claim 1, wherein the preamble generator generates the preamble signal during a predefined part of the preamble interval.

11. (Original) The mobile station device as claimed in claim 1, wherein the preamble generator generates the preamble signal during predefined beginning and ending parts of the preamble interval.

12. (Original) The mobile station device as claimed in claim 3, wherein the mobile station generates the preamble signal during the preamble transmission interval that is exclusively assigned to the mobile station.

13. (Currently Amended) A transmitting method at a mobile station comprising the steps of:

generating a preamble signal to be transmitted intermittently by a transmitter in an intermittent pattern that reduces interference on other reverse link channels during a preamble interval prior to a transmission interval of a reverse access channel message; and

spreading and modulating the preamble signal received from the preamble generator and transmitting it to a base station,

wherein the preamble interval includes a non-transmission interval, and

wherein the intermittent pattern is determined using $T = N(P + B) + A$,

where T indicates a total duration of the preamble interval, N is an integer greater than or equal to zero, P indicates a duration of a transmission interval, B indicates a duration of the non-transmission interval, and A indicates a duration of a final transmission interval before the transmission interval of the reverse access channel message.

14. (Original) The method as claimed in claim 13, wherein the preamble signal generating step comprises the substeps of:

generating a reverse pilot signal;

amplifying the reverse pilot signal to a predetermined strength; and

intermittently transmitting the amplified reverse pilot signal.

15. (Original) The method as claimed in claim 13, wherein the preamble interval comprises a repeating cycle of a preamble transmission interval and a preamble non-transmission interval, the preamble signal being generated during the preamble transmission interval.

16. (Original) The method as claimed in claim 15, wherein the preamble signal is generated in the preamble transmission interval just prior to the transmission interval of the access channel message, the preamble transmission being provided during an ending part of the preamble interval.

17. (Original) The method as claimed in claim 15, wherein the preamble signal is generated with transmission power increased by a predetermined level.

18. (Original) The method as claimed in claim 15, wherein the preamble signal generation stops upon receipt of sync acquisition information from the base station.

19. (Original) The method as claimed in claim 15, wherein the mobile station shortens the preamble interval and immediately transmits the access channel message, upon receiving sync acquisition information from the base station.

20. (Original) The method as claimed in claim 18, wherein the sync acquisition information is non-coded data.

21. (Original) The method as claimed in claim 15, wherein the preamble signal is generated with transmission power increased by a predetermined level during a next preamble transmission interval, upon failure to receive sync acquisition information in the preamble non-transmission interval.

22. (Original) The method as claimed in claim 13, wherein the preamble signal is generated during a predefined part of the preamble interval.

23. (Original) The method as claimed in claim 13, wherein the preamble signal is generated during predefined beginning and ending parts of the preamble interval.

24. (Original) The method as claimed in claim 15, wherein the preamble signal is generated during the preamble transmission interval exclusively assigned to a specified mobile station.

25. (Previously Presented) The mobile station device as claimed in claim 1, wherein the power level of the preamble signal is higher than a reverse pilot channel.

26. (Previously Presented) The mobile station device as claimed in claim 1, wherein the preamble signal is a transmission of a reverse pilot channel at an increased power level.

27. (Previously Presented) The method as claimed in claim 13, wherein the power level of the preamble signal is higher than a reverse pilot channel.

28. (Previously Presented) The method as claimed in claim 13, wherein the preamble signal is a transmission of a reverse pilot channel at an increased power level.

29. (Previously Presented) The mobile station device as claimed in claim 1, wherein the preamble interval includes a plurality of transmission intervals and a plurality of non-transmission intervals.

30. (Previously Presented) The method as claimed in claim 13, wherein the preamble interval includes a plurality of transmission intervals and a plurality of non-transmission intervals.

31. (Currently Amended) A mobile station device comprising:

a preamble generator for generating a preamble signal to be transmitted intermittently during a preamble interval prior to a transmission interval of a reverse access channel message, using a plurality of transmission intervals and at least one non-transmission interval, said intervals being determined by a base station to reduce interference on other reverse link channels; and

a transmitter for spreading and modulating the preamble signal received from the preamble generator and intermittently transmitting the spread and modulated preamble signal to the base station,

wherein said intervals are determined using $T = N(P + B) + A$,

where T indicates a total duration of the preamble interval, N is an integer greater than or equal to zero, P indicates a duration of a transmission interval, B indicates a duration of the non-transmission interval, and A indicates a duration of a final transmission interval before the transmission interval of the reverse access channel message.

32. (Cancelled)

33. (Currently Amended) A transmitting method at a mobile station comprising the steps of:

generating a preamble signal to be transmitted intermittently by a transmitter during a preamble interval prior to a transmission interval of a reverse access channel message, using a plurality of transmission intervals and at least one non-transmission interval, said intervals being determined by a base station to reduce interference on other reverse link channels;

spreading and modulating the preamble signal received from the preamble generator; and

intermittently transmitting the spread and modulated preamble signal to the base station,

wherein said intervals are determined using $T = N(P + B) + A$,

where T indicates a total duration of the preamble interval, N is an integer greater than or equal to zero, P indicates a duration of a transmission interval, B indicates a duration of the non-transmission interval, and A indicates a duration of a final transmission interval before the transmission interval of the reverse access channel message.

34-36. (Cancelled)